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EXAMINER
BATISTA, MARCOS

ART UNIT	PAPER NUMBER
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/529,961	WILLIAMS, ANDREW GORDON
	Examiner	Art Unit	
	MARCOS BATISTA	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 February 2010*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-74* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-74* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

1.   This Action is in response to Applicant's Appeal Brief filed on 02/09/2010. Claims

1-74 are still pending in the present application. This Action is made **NON-FINAL.**

2.   In view of the Appeal Brief filed on 02/09/2010, PROSECUTION IS HEREBY

REOPENED. The new status of the claims and a response to Applicant's arguments

are set forth below.

      To avoid abandonment of the application, appellant must exercise one of the

following two options:

      (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply

under 37 CFR 1.113 (if this Office action is final); or,

      (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed

by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and

appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth

in 37 CFR 41.20 have been increased since they were previously paid, then appellant

must pay the difference between the increased fees and the amount previously paid.

      A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by

signing below:

<div align="center">

/Rafael Pérez-Gutiérrez/
Supervisory Patent Examiner, Art Unit 2617

</div>

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the

conditions and requirements of this title.

Claim 40 is rejected under 35 U.S.C. 101 because the claimed invention is directed to

non-statutory subject matter. The language of the claim raises a question as to whether the claim

is directed merely to an abstract idea that is not tied to a technological art, environment or

machine which would result in a practical application producing a concrete, useful, and tangible

result to form the basis of statutory subject matter under 35 U.S.C. 101.

Claim 40, claims the non-statutory subject matter of a computer program element which

is nothing more than a data structure. Data structures not claimed as embodied in computer-

readable media are descriptive material per se and are not statutory because they are not capable

of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31

USPQ2d at 1754 (claim to a data structure per se held nonstatutory). Therefore, since the

claimed programs are not tangibly embodied in a physical medium and encoded on a computer-

readable medium then the Applicants has not complied with 35 U.S.C 101. The Examiner

suggests amending claim 40 to include something like "a data carrier having stored therein

program code" as described in the disclosure of the instant application at page 19 lines 5-11 in

order to overcome the 101 rejection.

Claim Objections

4.   Claim 1 is objected to because of the following informalities: The word

applicationspecific at the beginning of line 7 appears to be missing a dash between

application and specific (application-specific). Appropriate correction is required.

Response to Arguments

5.   Applicant's arguments filed in the Appeal Brief on 02/09/2010 have been fully

considered but they are not persuasive.

After carefully revising the Office Action pertinent to the present response and

remarks, the following main point(s) have been identified:

1) The Applicant states that Suumaki does not discloses "means for activating,

in response to the means for detecting the requested application-specific

packets, a plurality of packet sessions with application-specific QoS parameters,

without requiring explicit cooperation of application software. The Applicant also

states that the reason why Suumaki does not disclose the above features is

because Suumaki clearly discloses, in each and every one of his general and

specific examples, that activation of an application connection requires the

explicit cooperation of the corresponding connection with the QMOC (See pages

10 and 11 of the Appeal Brief).

Regarding point **1)**, Suumaki at column 7 lines 37-43 discloses that the (QoS

Management & Optimization Control) QMOC has the task of controlling the activation

connection and data flows of each application. The socket application programming

interface (SAPI) informs the QMOC of any particular application wishing to establish a

connection with another application or service. The SAPI transfers information to the

QMOC for certain applications so that the QMOC can take the full control of activating

the corresponding PDP. This does not necessarily mean that the QMOC needs the

cooperation of the SAPI in order to carry out the activation task. The QMOC is fully in

charge in controlling the activation of the application without explicit assistance from the

SAPI. A closer look to Suumaki at col. 11 line 51 – col. 12 line 2 suggests that the

QMOC can activate a particular PDP for a particular application even when information

is not transmitted from the SAPI to the QMOC (i.e., without interaction with the SAPI).

This is because the QMOC can consult the internal database for the required

information. It can also be seen at col. 11 line 51 – col. 12 line 2, that the activation of

the PDP is in response to detecting a traffic class (i.e., application-specific packet).

Suumaki, column 7 lines 37-43:

3)   FIG. 3a also shows the control block QMOC (QoS

Management & Optimization Control). The tasks of this

control block QMOC include controlling the activation of

application connections and data flows of each application

and the allocation of the resources required. In addition,

the control block QMOC performs the changes required by the

altered needs of the quality of service.

Suumaki, col. 11 line 51 – col. 12 line 2:

"When the E-mail application (application H) is started, the

socket application programming interface does not transmit

quality of service information, but for this application,

quality of service information has been saved in the

internal database. **From this information, the control block**

QMOC detects that the fourth traffic class has been

specified for this application. The PDP context

corresponding to the fourth traffic class is the ninth PDP

context PDP9, and thus the control block QMOC selects this

PDP context for use by this application H. In addition, the

control block QMOC specifies a data transfer filter for the

application. This data transfer filter is, for instance, a

database in which information such as the identifier used

in the data flow packets, the PDP context, quality of

service parameters or other information is saved. **After**

this, the control block QMOC activates the selected PDP

context PDP9 and sends the data from the data transfer

filter to the packet classifier block PAC of the mobile

terminal MT and the packet-switched network, preferably to

the gateway GPRS support node 3G-GGSN, which is the second

end of the data transfer connection"

Therefore, the argued features are written such that they read upon the cited

reference(s).

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7.   The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

   1.   Determining the scope and contents of the prior art.
   2.   Ascertaining the differences between the prior art and the claims at issue.
   3.   Resolving the level of ordinary skill in the pertinent art.
   4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

8.   Claims 1-10, 13-16, 18-28, 31-34, 36-40, and 43-74 are rejected under 35 U.S.C.

103(a) as being unpatentable over Suumaki et al. (US 6847610 B1), hereafter

"Suumaki," in view of Jungck et al. (US 20060029104 A1), hereafter "Jungck."

        Consider claim 1, Suumaki as modified by Jungck discloses an apparatus for

session control in a wireless communication network, comprising: means for detecting

requested application-specific packets in a packet stream **(see fig. 5, col. 8 lines 42-**

48, col. 11 lines 55-60); and means for activating, in response to the means for

detecting requested application-specific packets, a plurality of packet sessions with

application-specific QoS parameters, without requiring explicit cooperation of application

software **(see col. 7 lines 38-41, col. 11 lines 65-67, col. 12 lines 1-2, and 46-49 - the**

QMOC does the QoS parameters detection independently of any type of

application).

        Suumaki, however, does not particular refer to means for blocking- application-

specific packets in the packet stream that are not the requested application-specific

packets. Jungck, in the same field of endeavor, teaches means for blocking-

application-specific packets in the packet stream that are not the requested application-

specific packets (**see pars. 0175 lines 1-15, 0176 lines 6-16**).

It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to modify the invention of Suumaki and have it include means for

blocking- application-specific packets in the packet stream that are not the requested

application-specific packets, as taught by Jungck. The motivation would have been in

order to *enhance Internet infrastructure to more efficiently deliver content from providers*

to users and provide additional network throughput, reliability, security and fault

tolerance (**see par. 0006 lines 1-4**).

Consider claim 2, Suumaki as modified by Jungck discloses the invention of

claim 1 above, Suumaki also teaches further comprising means for deactivating at least

one of the plurality of packet sessions (see col. 14 lines 56-58).

Consider claim 3, Suumaki as modified by Jungck discloses the invention of

claim 1 above, Suumaki also teaches wherein the wireless communication network

comprises a UMTS radio access network (see col. 3 lines 31-35).

Consider claim 4, Suumaki as modified by Jungck discloses the invention of

claim 1 above, Suumaki also teaches wherein the packet sessions comprise Packet

Data Protocol (PDP) contexts (see col. 3 lines 41-46).

Consider claim 5, Suumaki as modified by Jungck discloses the invention of

claim 1 above, Suumaki also teaches wherein the means for detecting comprises

stateful inspection means, and the apparatus further comprises session manager

means and packet filter means responsive to the stateful inspection means (see col. 8 lines 42-48 – packet are routed based in part to theirs respective connection).

Consider claim 6, Suumaki as modified by Jungck discloses the invention of claim 1 above, Suumaki also teaches wherein the means for detecting is arranged to inspect uplink packet flows to detect application-specific packet flows, via application-specific control messages (see col. 8 lines 55-61).

Consider claim 7, Suumaki as modified by Jungck discloses the invention of claim 1 above, Suumaki also teaches wherein the means for detecting is arranged to inspect downlink packet flows to detect application-specific packet flows, via application-specific control messages (see col. 10 lines 26-35).

Consider claim 8, Suumaki as modified by Jungck discloses the invention of claim 1 above, Suumaki also teaches wherein the packet sessions comprise conversational class PDP contexts (see tab. 1, col. 5 lines 5-7).

Consider claim 9, Suumaki as modified by Jungck discloses the invention of claim 8 above, Suumaki also teaches wherein the conversational class PDP contexts are arranged to carry Voice over IP (VoIP) traffic (see col. 3 lines 41-46, col. 12 lines 43-46).

Consider claim 10, Suumaki as modified by Jungck discloses the invention of claim 8 above, Suumaki also teaches wherein the conversational class PDP contexts are arranged to carry Video over IP traffic (see col. 3 lines 41-46, col. 12 lines 43-46).

Consider claim 13, Suumaki as modified by Jungck discloses the invention of claim 1 above, Suumaki also teaches wherein the packet sessions comprise streaming

class PDP contexts (see col. 7 lines 13-19).

Consider claim 14, Suumaki as modified by Jungck discloses the invention of

claim 13 above, Suumaki also teaches wherein the streaming class PDP contexts are

arranged to carry streaming media traffic controlled by Real Time Streaming Protocol

(see col. 7 lines 13-19).

Consider claim 15, Suumaki as modified by Jungck discloses the invention of

claim 1 above, Suumaki also teaches wherein the packet sessions comprise interactive

class PDP contexts (see tab. 1, col. 4 lines 65-67, col. 5 line 1).

Consider claim 16, Suumaki as modified by Jungck discloses the invention of

claim 1 above, Suumaki also teaches wherein the packet sessions comprise

background class PDP contexts (see tab. 1, col. 4 lines 65-67, col. 5 line 1).

Consider claim 18, Suumaki as modified by Jungck discloses the invention of

claim 16 above, Suumaki also teaches wherein the background class PDP contexts are

arranged to carry Simple Mail Transfer Protocol (SMTP) traffic (see fig. 3a, col. 7 lines

13-19).

Consider claims 19-28, 31-34 and 36, these are method claims corresponding to

system claims 1-10, 13-15, and 18. Therefore, they have been analyzed and rejected

based upon the system claims 1-10, 13-16, and 18 respectively.

Consider claim 37, Suumaki as modified by Jungck discloses the invention of

claim 19 above, Suumaki also teaches wherein the method is performed in User

equipment (UE) (see fig. col. 8 lines 55-64).

Consider claim 38, Suumaki as modified by Jungck discloses the invention of

claim 1 above, Suumaki also teaches User equipment (UE) for use in a UTRA system, the user equipment comprising the apparatus of claims 1 (see fig. 4a, col. 1 lines 65-67, col. 2 lines 1-6).

Consider claim 39, Suumaki as modified by Jungck discloses the invention of claim 19 above, Suumaki also teaches an integrated circuit comprising the apparatus of claim 1 (see col. 7 lines 51-54).

Consider claim 40, this claim discusses the same subject matter as claim 19. Therefore, it has been analyzed and rejected based upon the rejection to claim 19.

Consider claims 43, 44 and 58, Suumaki as modified by Jungck discloses the invention of claims 2, 3 and 20 above, Suumaki also teaches wherein the packet sessions comprise Packet Data Protocol (PDP) contexts (see col. 3 lines 41-46).

Consider claims 45, 46 and 47, Suumaki as modified by Jungck discloses the invention of claims 2, 3 and 4 above, Suumaki also teaches wherein the means for detecting comprises stateful inspection means, and the apparatus further comprises session manager means and packet filter means responsive to the stateful inspection means (see col. 8 lines 42-48 – packet are routed based in part to theirs respective connection).

Consider claims 48 and 59, Suumaki as modified by Jungck discloses the invention of claims 5 and 23 above, Suumaki also teaches wherein the means for detecting is arranged to inspect uplink packet flows to detect application-specific packet flows, via application-specific control messages (see col. 8 lines 55-61).

Consider claims 49 and 60, Suumaki as modified by Jungck discloses the

invention of claims 5 and 23 above, Suumaki also teaches wherein the means for

detecting is arranged to inspect downlink packet flows to detect application-specific

packet flows, via application-specific control messages (see col. 10 lines 26-35).

Consider claims 50, 51, 61 and 62, Suumaki as modified by Jungck discloses the

invention of claims 2, 4, 20 and 22 above, Suumaki also teaches wherein the packet

sessions comprise conversational class PDP contexts (see tab. 1, col. 5 lines 5-7).

Consider claims 52, 53, 63 and 64, Suumaki as modified by Jungck discloses the

invention of claims 2, 4, 20 and 22 above, Suumaki also teaches wherein the packet

sessions comprise streaming class PDP contexts (see col. 7 lines 13-19).

Consider claims 54, 55, 65 and 66, Suumaki as modified by Jungck discloses the

invention of claims 2, 4, 20 and 22 above, Suumaki also teaches wherein the packet

sessions comprise interactive class PDP contexts (see tab. 1, col. 4 lines 65-67, col. 5

line 1).

Consider claims 56, 57, 67 and 68, Suumaki as modified by Jungck discloses the

invention of claims 2, 4, 20 and 22 above, Suumaki also teaches wherein the packet

sessions comprise background class PDP contexts (see tab. 1, col. 4 lines 65-67, col. 5

line 1).

Consider claims 69-74, Suumaki as modified by Jungck discloses the invention

of claims 21-25 above, Suumaki also teaches wherein the method is performed in User

equipment (UE) (see fig 3b, col. 8 lines 55-64).

9.   Claims 11 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Suumaki et al. (US 6847610 B1), hereafter "Suumaki," in view of Jungck et al. (US 20060029104 A1), hereafter "Jungck," further in view of Dorenbosch et al. (US 20030235184 A1), hereafter "Dorenbosch."

Consider claim 11, Suumaki as modified by Jungck discloses claims 1 and 9 above, but does not particular refer to wherein the traffic is based on originated calls controlled by Session Initiation Protocol (SIP).

Dorenbosch, in analogous art, teaches wherein the traffic is based on originated calls controlled by Session Initiation Protocol (SIP) (see par. 0055 lines 7-11).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Suumaki as modified by Jungck and have it include wherein the traffic is based on originated calls controlled by Session Initiation Protocol (SIP), as taught by Dorenbosch. The motivation would have been in order to provide a mean for connection setup and session control (see par. 0055 lines 7-11).

Consider claim 29, this is method claim corresponding to system claims 11. Therefore, it has been analyzed and rejected based upon the system claim 11 above.

10.   Claims 12, 17, 30, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suumaki et al. (US 6847610 B1), hereafter "Suumaki," in view of Jungck et al. (US 20060029104 A1), hereafter "Jungck," further in view of Fenton et al. (US 20030193967 A1), hereafter "Fenton."

Consider claim 12, Suumaki as modified by Jungck discloses claims 1 and 9 above, but does not particular refer to wherein the traffic is based on originated calls

controlled by H.323 protocol.

Fenton, in analogous art, teaches wherein the traffic is based on originated calls

controlled by H.323 protocol (see par. 0049 lines 11-14).

It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to modify the invention of Suumaki as modified by Jungck and have

it include wherein the traffic is based on originated calls controlled by H.323 protocol, as

taught by Fenton. The motivation would have been in order to provide access to

information via an open standard protocol (see par. 0049 lines 11-14).

Consider claim 17, Suumaki discloses as modified by Jungck claims 1 and 16

above, but does not particular refer to wherein the background class PDP contexts are

arranged to carry Post Office Protocol - Version 3 (POP3) traffic.

Fenton, in analogous art, teaches to wherein the background class PDP contexts

are arranged to carry Post Office Protocol - Version 3 (POP3) traffic (see par. 0049 lines

11-14).

It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to modify the invention of Suumaki as modified by Jungck and have

it include wherein the background class PDP contexts are arranged to carry Post Office

Protocol - Version 3 (POP3) traffic, as taught by Fenton. The motivation would have

been in order to provide access to information via an open standard protocol (see par.

0049 lines 11-14).

Consider claims 30 and 35, these are method claims corresponding to system

claims 12 and 17. Therefore, they have been analyzed and rejected based upon the

system claims 12 and 17 respectively.

11.   Claims 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Suumaki et al. (US 6847610 B1), hereafter "Suumaki," in view of Jungck et al. (US

20060029104 A1), hereafter "Jungck," further in view of Boyle et al. (US 20050235349

A1), hereafter "Boyle."

Consider claims 41 and 42, Suumaki as modified by Jungck discloses claims 5

and 23 above, but does not particular refer to wherein detecting in a stateful inspector

comprises inspecting packets, implying a state of an application-specific packet session

via control packets and allowing packets for said session to flow through the firewall if

said session originated from inside the firewall or otherwise, blocking said session

otherwise.

Boyle, in the same field of endeavor, teaches wherein detecting in a stateful

inspector comprises inspecting packets, implying a state of an application-specific

packet session via control packets and allowing packets for said session to flow through

the firewall if said session originated from inside the firewall or otherwise, blocking said

session otherwise (see pars. 0009 lines 1-6, 0052 lines 1-3, 0059 lines 1-5).

It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to modify the invention of Suumaki as modified by Jungck and have

it include wherein detecting in a stateful inspector comprises inspecting packets,

implying a state of an application-specific packet session via control packets and

allowing packets for said session to flow through the firewall if said session originated

from inside the firewall or otherwise, blocking said session otherwise, as taught by

Boyle. The motivation would have been in order to prevent unsolicited network traffic

from entering a private network (see par. 0009 lines 1-6).

Conclusion

12.   Any inquiry concerning this communication or earlier communications from the

Examiner should be directed to Marcos Batista, whose telephone number is (571) 270-

5209. The Examiner can normally be reached on Monday-Thursday from 8:00am to

5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's

supervisor, Rafael Pérez-Gutiérrez can be reached at (571) 272-7915. The fax phone

number for the organization where this application or proceeding is assigned is (571)

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist/customer service whose telephone

number is (571) 272-2600.

/Marcos Batista/
Examiner

/Rafael Pérez-Gutiérrez/
Supervisory Patent Examiner, Art Unit 2617

04/21/2010